

Facility A Case Study

"AS-IS" Narrative

Problem: All manner of excess equipment continues to "pile up" at various informal "dump" sites all over the facility.

Process: In order for anything to move on the facility, the requisitioner must call one of twenty different coordinators depending on the material in question. Few, if any, people at the facility know who to call for every instance. Often personnel with knowledge of special handling requirements for such things as explosives have been moved out of the area of concern. Necessary paperwork is a function of no less than twelve different administrative systems and is driven by the special handling precautions needed for a specific material. Frequently, movers are dispatched to enact a move but, the paperwork is not correct and the move results in a "dead run." Worse yet, incidents have occurred involving improper handling and storage of radioactive and hazardous materials as well as cases of oversized equipment being mishandled. The transportation dispatcher which handles the move calls is overloaded and customer complaints are rising steadily.

Information on 4 Stages of Team Development

Forming - Team members are enthusiastic but cautious about the purpose of the team and their contribution. Teams should focus on clearly identifying and getting agreement to team goals, roles and expectations.

Storming - As team members begin working together on tasks, there is more opportunity for disagreements and frustration. Teams will need to use excellent communication skills and conflict management techniques in this stage. Teams begin to address how they will handle disagreements, solve problems, and make decisions as a team.

Norming - Team members come to agreement on their processes for team decisions, learn to share leadership responsibilities, and begin to build an environment of trust and cooperation.

Performing - The members are committed to the team, effectively working toward goals, dealing with issues collaboratively, and sharing leadership of the team.

Team Effectiveness Factors Description

1. **Goals and Objectives:** In order for a team to operate effectively, it must have stated goals and objectives, and team members must be committed to reaching goals. Time spent setting goals and objectives early in the teams development will enhance the team cohesiveness and focus.
2. **Utilization of Resources:** Team effectiveness is enhanced when every member has the opportunity to contribute and when all opinions are heard and considered.
3. **Trust and Conflict:** Any time you have a group of people working together, there is an opportunity for disagreement and conflict. For a team to reach an optimum level of performance, they must learn how to manage conflicts effectively, by developing a climate of openness, respect and trust.
4. **Leadership:** In the early stages of team development, team members may look toward the team leader to direct the team on task functions, such as initiating discussion, clarifying issues, and checking for consensus; as well as guide the team maintenance functions, such as drawing everyone into the discussion, mediating conflict, and supporting and motivating the team. But, as the team develops, the responsibility for these team leadership functions becomes a shared responsibility among the team members.
5. **Control and Procedures:** As with any organization, a team needs some element of control and procedures to guide its activities, such as meeting agenda, minutes, and action plans. Involving the team members in establishing the team norms and procedures builds commitment and cohesion among the team members. The process of establishing team norms and processes, also provides an opportunity for team member to learn how to come to agreement on relatively “safe” issues, before addressing the more difficult task focused decisions they will eventually need to address.
6. **Interpersonal Communications:** Effective team development depends on the ability of team members to communicate with one another in an honest and open manner. Team members clearly assert their ideas and listen openly to others thoughts. Team members participate freely in the discussion.
7. **Problem Solving and Decision Making:** Effective teams have an agreed upon approach to identifying problems, evaluating potential solutions, and making decisions. The lack of an agreed upon approach can result in wasted time, misunderstandings, lack of commitment of the decision, and “bad” decisions.

- 8. Experimentation/Creativity:** While it is important for teams to have agreed upon approaches to problem solving and decision making, a part of those processes will include looking for new ideas or new solutions to the task. This is the synergy that comes from the diverse team members sharing ideas and building upon each other's ideas to come up with a new, even better approach. Effective teams utilize brainstorming, alternative possible solutions, and other methods of generating creativity and synergy on the team.
- 9. Evaluation:** Even the most effective teams need to stop occasionally and check how they are doing in accomplishing their task and how they are functioning as a team. This evaluation or "critique" can help the team pinpoint and correct factors that are preventing them from being fully effective.

Team Performance Indicator Example

1. When action is taken, clear assignments are made and accepted.
2. The leader of the group does not dominate it, nor on the contrary, does the group defer unduly to him or her.
3. People are free in expressing their feelings as well as their ideas both on the problem and on the group's operation.

Nail Exercise

Directions: The directions for this evolution are very simple. All of the nails must balance on the nail stuck in the wood without touching any thing else. Each of the “free” nails can only touch another nail. All of the nails must balance on the nail stuck in the wood. The nail in the wood can only touch the wood and the free nails. In other words, to solve this exercise, all the nails can only be touching another nail except the nail in the wood which can touch the wood block another nail but nothing else. Be sure and ask the class if they have seen or heard of this exercise before and excuse those who have.

Time: Allow 20-30 minutes

Objective: The instructor should observe the teams working on solving the exercise. The teams will surely exhibit characteristics of Stage 1 and maybe Stages 2 and 3 of Team development. Additionally, as soon as one team solves the problem, the other teams will notice and copy the solution. In debriefing the exercise, the instructor should point out the stages of team development he/she observed and make the tie that as soon as one team figured out the answer, the others copied it...just like with EWP. Why reinvent the wheel when there is already a workable solution available.

NOTE: *At least* one team has always solved the exercise in the allotted time.

CASE STUDY AS-IS Work Planning Process Narrative

Work Requester contacts Data Entry Clerk (DEC) who receives the work order request and assigns a work order (WO) number.

The DEC forwards the WO to the Planner/Estimator (P/E).

The P/E reviews the work description and defines the work scope based on description and individual experience. If the P/E doesn't understand the work required, he/she contacts the requestor for additional information and clarification.

After the P/E understands the work description, he/she walks down the job and talks to the Facility Supervisor to define the work scope. This includes determining the need for permits and other permissive requirements.

After identifying the work scope, the P/E estimates the job. This includes ordering needed materials and supplies and estimating man-hours through discussions with maintenance supervision. The P/E then develops the work instruction which includes hold points, special tools, and post maintenance testing.

The P/E then develops permits and seeks approval which typically requires contacting each permitting authority individually. The P/E attaches the approved permits and other work instructions to the WO to create a work package.

The work package is forwarded to the Scheduler to schedule the identified task.

Checklist for Instructor/Observers

Did the team members clearly identify the team purpose, goal and objectives?

Was there participation by all team members in the discussion or were there one or two dominant team members?

Was there a climate of openness and trust on the team?

Were disagreements focused on the facts and not personal attacks or judgments?

Did all team members share responsibility for the team's progress, or did the team members abdicate leadership of the team to one person?

Did the team agree upon how they would approach the task, identify issues, and make decisions, or was there little structure to the team's approach?

Did team members communicate directly and listen attentively to each other?

Did the team use any particular group problem solving or decision making techniques?

What methods were used to stimulate new ideas and creativity on the team?

Did the team periodically check their progress on the task, or question how they were working together as a team?

Classic EWP Performance Indicators	Specific Example
Cost Avoidance	11:1 payback for investment in EWP, resulted in cost avoidance of \$7.6 million
Reduce Backlog	33% reduction in sitewide maintenance backlog
Decrease cycle time	46% reduction in maintenance request cycle time
Decrease injury and illness rates	21% reduction in personnel accidents and reportable events with a corresponding 36% increase in worker productivity
Increase involvement of Safety and Health personnel	100% increase in work reviewed by S&H personnel
Increase productivity	66% improvement in time required to complete work activities associated with packaging, managing, and shipping waste

Half of Eight Exercise

Draw the number 8 on a flipchart.

Ask the class, “What is half of eight?”

The typical answer will be four.

Now divide the 8 with a horizontal line

Tell the class, “It can also be zero”

Now divide the 8 vertically

Tell the class, “It can also be 3. It all depends on how you divide it.